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**TSENG et al.**(10) **Pub. No.: US 2012/0086053 A1**(43) **Pub. Date: Apr. 12, 2012**(54) **TRANSISTOR HAVING NOTCHED FIN  
STRUCTURE AND METHOD OF MAKING  
THE SAME**(22) Filed: **Oct. 8, 2010****Publication Classification**(75) Inventors: **Chih-Hung TSENG**, Zhutang  
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257/E21.54**(73) Assignee: **TAIWAN SEMICONDUCTOR  
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LTD.**, Hsinchu (TW)(57) **ABSTRACT**

A transistor includes a notched fin covered under a shallow trench isolation layer. One or more notch may be used, the size of which may vary along a lateral direction of the fin. In some embodiments, The notch is formed using anisotropic wet etching that is selective according to silicon orientation. Example wet etchants are tetramethylammonium hydroxide (TMAH) or potassium hydroxide (KOH).

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